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Application No. 10/565948 Responsive to the office action dated August 14, 2009

## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

**HSML** 

## **Listing of Claims:**

1. (Currently Amended) A compound represented by the general formula (I):

$$R^{6}-R^{5}-R^{4}-SO_{2}-W$$
 (I)

wherein W is a group represented by the formula:

wherein R<sup>1</sup> is NHOH, hydroxy, or lower alkyloxy;

R<sup>2</sup> and R<sup>2</sup> are each independently hydrogen atom, optionally substituted lower alkyl, optionally substituted aralkyl, optionally substituted heteroaryl, or optionally substituted heteroarylalkyl;

R<sup>3</sup> is hydrogen atom, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, or optionally substituted beteroarylalkyl;

 $Z^{1}$  is -CH<sub>2</sub>-, -NH-, -O-, or -S-;

a broken line (---) represents the presence or absence of a bond;

R<sup>4</sup> is optionally substituted <u>arylene phenylene</u> or optionally substituted <u>heteroarylene</u> thiophenylene;

R<sup>5</sup> is a group represented by the formula:

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R<sup>6</sup> is optionally substituted aryl phenyl, optionally substituted naphthyl heteroaryl, optionally substituted eyeloalkyl furanyl, thiophenyl, optionally substituted cyclohexyl, optionally substituted cyclohexenyl, optionally substituted benzoxolanyl, optionally substituted benzoxolanyl, optionally substituted benzoxolanyl, or optionally substituted non-aromatic heterocyclic groups benzodioxanyl;

its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.

2. (Original) A compound of claim 1 wherein W is a group represented by the formula:

wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> are as defined in claim 1, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.

3. (Previously presented) A compound of claim 1 wherein R<sup>6</sup> is a group represented by the formula:

$$(R^{7})p$$

$$(R^{7})p$$

$$(R^{7})q$$

$$(R^{7})q$$

$$(R^{7})p$$

$$(R^{7})p$$

$$(R^{7})p$$

$$(R^{7})m$$

wherein R<sup>7</sup> is each independently halogen, lower alkyl, cycloalkyl, lower alkenyl, lower alkynyl, lower alkyloxy, lower alkyloxy, lower alkylthio, halo(lower)alkyl, halo(lower)alkyloxy, halo(lower)alkylthio, hydroxy, hydroxy(lower)alkyl, carboxy, lower alkyloxycarbonyl, lower alkylsulfonyl, carbamoyl, acyl, acyloxy, nitro, cyano, optionally substituted amino, or optionally substituted aminocarbonyl; m is an integer from 0 to 3; n is an integer from 0 to 4; p is an integer from 0 to 5; q is an integer from 0 to 6; r is an integer from 0 to 7; s is an integer from 0 to 11, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.

- 4. (Previously presented) A compound of claim 1 wherein R<sup>1</sup> is hydroxy, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.
- 5. (Previously presented) A compound of claim 1 wherein R<sup>2</sup> is lower alkyl optionally substituted by halogen, hydroxy, carboxy, carbamoyl, mercapto, lower alkylthio, guanidino, amino, or cycloalkyl; aryl optionally substituted by hydroxy; aralkyl optionally substituted by halogen, hydroxy, or nitro; heteroaryl optionally substituted by hydroxy; heteroarylalkyl optionally substituted by hydroxy; or hydrogen atom, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.
- 6. (Original) A compound of claim 5 wherein R<sup>2</sup> is hydrogen atom, methyl, isopropyl, s-butyl, isobutyl, t-butyl, hydroxymethyl, 1-hydroxyethyl, 2-hydroxyethyl, carboxymethyl, carboxymethyl, carboxymethyl, carboxymethyl, carboxymethyl, carboxymethyl, carboxymethyl, carboxymethyl, 2-methylthioethyl, cyclohexylmethyl, 3-guanidinopropyl, 4-aminobutyl, phenyl, 4-hydroxyphenyl, benzyl, 4-hydroxybenzyl, 4-fluorobenzyl, 4-chlorobenzyl, 4-bromobenzyl, 4-nitrobenzyl, phenylethyl, 1-naphthylmethyl, 2-naphthylmethyl, biphenylmethyl, indolyl, thienyl, indol-3-ylmethyl, (5-hydroxyindol-3-yl)methyl, thiophen-2-ylmethyl, imidazolylmethyl, benzoxazol-2-ylmethyl, benzthiazol-2-ylmethyl, or benzimidazol-2-ylmethyl, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.

7. (Previously presented) A compound of claim 1 wherein R<sup>3</sup> is hydrogen atom, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.

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- 8. (Previously presented) A compound of claim 1 wherein R<sup>4</sup> is 1,4-phenylene or 2,5-thiophendiyl, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.
- 9. (Previously presented) A compound of claim 1 wherein R<sup>6</sup> is a group represented by the formula:

$$(R^{7})p$$

$$(R^{7})r$$

$$(R^{7})m$$

wherein R<sup>7</sup>, m, p, r, and s are as defined in claim 3, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.

## 10-11. (Canceled)

- 12. (Previously presented) A pharmaceutical composition which contains a compound of claim 1 as an active ingredient.
- 13. (Previously presented) A metalloproteinase inhibitor which contains a compound of claim 1 as an active ingredient.
- 14. (Previously presented) A matrix metalloproteinase inhibitor which contains a compound of claim 1 as an active ingredient.

## 15-16. (Canceled)

17. (Previously presented) A compound of claim 2 wherein R<sup>6</sup> is a group represented by the formula:

**HSML** 

$$(R^{7})p$$

$$(R^{7})q$$

$$(R^{7})q$$

$$(R^{7})q$$

$$(R^{7})q$$

$$(R^{7})p$$

$$(R^{7})p$$

$$(R^{7})p$$

$$(R^{7})m$$

wherein R<sup>7</sup> is each independently halogen, lower alkyl, cycloalkyl, lower alkenyl, lower alkynyl, lower alkyloxy, lower alkyloxy, lower alkylthio, halo(lower)alkyl, halo(lower)alkyloxy, halo(lower)alkylthio, hydroxy, hydroxy(lower)alkyl, carboxy, lower alkyloxycarbonyl, lower alkylsulfonyl, carbamoyl, acyl, acyloxy, nitro, cyano, optionally substituted amino, or optionally substituted aminocarbonyl; m is an integer from 0 to 3; n is an integer from 0 to 4; p is an integer from 0 to 5; q is an integer from 0 to 6; r is an integer from 0 to 7; s is an integer from 0 to 11, its optically active substance, their pharmaceutically acceptable salt, or a solvate thereof.